Title of Article: Vehicular Pollution of Soil in Ota, Ogun State, Nigeria.

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Abstract: Vehicular emissions have been found to constitute the major source of environmental pollution. Unfortunately, in most developing countries such as Nigeria, the contribution of vehicular emission to soil pollution and its implication on the environment has not been studied in details. In view of this challenge, the influence of vehicular pollution on the accumulation of heavy metal in the surface soils of the Ado-Odo local government of Ogun State, Nigeria has been investigated. The main objective of this research was to determine the effect of vehicular emissions such as copper, cadmium, lead, manganese, nickel and sulphate on soil around Ota. Seven locations were selected due to the high concentration of traffic experienced in the location and three sites with little or no traffic concentration were also selected within the seven locations to act as a control sites. Samples were taken for the months of December, January and February and one sample was taken from each of the control sites making it a total of 24 samples. The concentrations of copper, cadmium, lead, manganese, nickel and sulphate in the samples were determined by Perkins Elmer 3300 and AA Winlab software. The concentration of the heavy metals from the main sites was higher than the concentration of heavy metals from their respective control samples. The concentration of all the heavy metals in the seven locations were below that of the European union regulatory standard except the values of copper in site C (32.73mg/kg) and site E (34.24mg/kg) which were slightly higher than the 30mg/kg stipulated value for copper. Nickel in site F (51.39mg/kg) was a little higher than the 50mg/kg stipulated the European Union for the concentration of nickel in a safe soil.